

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A rotary electric machine comprising:

a stator including a stator core having a plurality of teeth and stator coils mounted on the teeth, each said stator coil including a bobbin that is fitted to one of the teeth and a phase coil wound around the bobbin, each said bobbin including a pair of bobbin terminals respectively connected to terminal for connecting opposite ends of the phase coil; and

a stator housing for accommodating said stator at one side thereof, said stator housing including an insert mold and a plurality of stator terminals ~~embedded in~~ extending straight toward said stator from the insert mold, mold to be connectable to an outside electric device, each said stator terminal ~~has~~ having a first contact portion;

wherein each said bobbin terminal has a second contact portion;

wherein each said bobbin has a pair of terminal grooves formed at one end thereof, each to receive and guide a said stator terminal to near the second contact portion of the respective bobbin terminal; and

wherein, when said stator is assembled to said stator housing, said stator terminals extend along the respective terminal grooves to automatically pass in contact with the respective first contact portions to near the respective second contact portions when said stator is accommodated in said stator housing.

Claim 2. (Canceled).

3. (Currently amended) The rotary electric machine as claimed in ~~claim 2~~ claim 1, wherein each said terminal groove has ~~an~~ a widened end opening ~~wide~~ to receive one of said stator terminals.

4. (Original) The rotary electric machine as claimed in claim 1, wherein said plurality of stator terminals is assembled into a resinous frame, and wherein said resinous frame is embedded in said insert mold.

5. (Original) The rotary electric machine as claimed in claim 1, wherein said stator housing further comprises a resinous frame embedded in said insert mold to hold said plurality of stator terminals and a metal reinforcement plate for supporting a ball bearing that rotatably supports an end of said rotor.

6. (Original) The rotary electric machine as claimed in claim 5, wherein said stator housing has a center bore for supporting said ball bearing, and wherein said center bore has an inside surface the diameter of which is formed with reference to one of an outside diameter and inside diameter of said stator.

7. (Original) The rotary electric machine as claimed in claim 1, wherein said plurality of stator coils comprises a first coil group including phase coils disposed in a circumferential direction and a second coil group including phase coils disposed in a circumferential direction, and wherein said plurality of stator terminals comprises a first terminal group and a second terminal group that are disposed to be symmetric to each other with respect to a diametric line of a contour of the assembled stator terminals.

8. (Original) The rotary electric machine as claimed in claim 7, wherein said stator terminals are stamped out from a metal plate.

9. (Original) The rotary electric machine as claimed in claim 8, further comprising a first connector for connecting said stator terminals of the first terminal group to an outside electric device and a second connector, separated from said first connector, for connecting said stator terminals of the second terminal group to an outside electric device.

10. (Original) The rotary electric machine as claimed in claim 1, further comprising a sensor connector for connecting said sensor terminals to an outside electric device, wherein said stator housing further includes rotation angle detector and a plurality of sensor terminals embedded in said insert mold, and wherein said stator terminals and said sensor connector are integrated.

11. (Currently amended) A rotary electric machine comprising:
a stator core having a plurality of teeth and bobbins respectively fitted to the teeth;
a plurality of phase coils respectively wound around said bobbins, each said bobbin including a pair of bobbin terminals to which opposite ends of one of said phase coils are connected; and
a stator housing for accommodating said stator ~~coil~~ core and said phase coils, said stator housing including a plurality of stator terminals extending straight toward said stator core ~~embedded to be connectable to an outside electric device~~, each said stator terminal having a first contact portion at an end thereof; wherein
each said bobbin terminal has a second contact portion in contact with the first contact portion, ~~when said stator is accommodated in said stator housing and~~
each said bobbin has a pair of terminal grooves formed at one end thereof near said pair of bobbin terminals to receive said stator terminals so as to automatically pass each said first contact portion to near the respective second contact portion.

12. (Currently amended) A method of manufacturing a rotary electric machine that includes a stator core having a plurality of teeth and stator coils mounted on the teeth and a stator housing having a plurality of stator terminals extending toward the stator core to be connectable to an outside electric device, said method comprising the steps of:

winding a phase coil around bobbins, each of which has a pair of bobbin terminals and a pair of grooves, each for receiving a respective stator terminal;
respectively connecting opposite ends of each phase coil to the bobbin terminals of each pair;
fitting each bobbin to one of the teeth of said stator core; and
~~accommodating said~~ assembling the stator core into said stator housing to insert the stator terminals into the grooves of the bobbins so that, wherein each said bobbin terminal is brought in contact with one of the stator terminals ~~terminal when the stator is accommodated in the stator housing.~~

13. (Previously presented) The rotary electric machine as claimed in claim 1, wherein a pair of recesses is formed in each said bobbin, each for receiving a respective said bobbin terminal.

14. (Previously presented) The rotary electric machine as claimed in claim 1, wherein each said bobbin terminal includes a projection projecting towards said first contact surface thereby to define said second contact surface/portion.

15. (Previously presented) The rotary electric machine as claimed in claim 1, wherein the bobbin terminals and stator terminals are welded to each other at said contact portions thereof.